



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,192	08/10/2001	Shell Sterling Simpson	10007680-1	6999

7590 09/14/2007
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

NANO, SARGON N

ART UNIT	PAPER NUMBER
----------	--------------

2157

MAIL DATE	DELIVERY MODE
-----------	---------------

09/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/928,192
Filing Date: August 10, 2001
Appellant(s): SIMPSON, SHELL STERLING

MAILED

SEP 13 2007

Technology Center 2100

Shell S. Simpson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/19/2007 appealing from the Office action
mailed on 1/3/2007

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2003/0011805 A1

Yacoub

6-1996

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if *the* international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7 – 29 and 31 – 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Yacoub Patent Application Publication No. 20030011805.

As to claim 7, Yacoub teaches one or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors, causes the one or more processors to perform acts comprising:

identifying one or more devices in a network (see paragraph 0042, Yacoub discloses a number of network printers);

obtaining, for at least one of one or more network switches in the network, an indication of which port of the network switch a computing device is coupled to

(see paragraph 0020, Yacoub discloses querying and computing the location or printers);

obtaining, for each of the one or more identified devices and for the at least one network switch, an indication of which port of the network switch the identified device is coupled to (see paragraphs 0020 and 0036, Yacoub discloses mapping the location of all available printers on a network); and

determining, for at least one of the one or more identified devices, how physically distant the identified device is to the computing device, wherein the determining is based at least in part on the indication of which port of the network switch the computing device is coupled to and the indication of which ports of the network switch the one or more identified devices are coupled to (see 0030, Yacoub discloses determining the nearest printer to a user).

As to claim 9, Yacoub teaches one or more computer readable media as recited in claim 7, wherein obtaining an indication of which port of the network switch a computing device is coupled to comprises obtaining the indication from the network switch (see paragraph 0030).

As to claim 8, one or more computer readable media as recited in claim 7, wherein at least one of the identified one or more devices comprises a printer (see 0040).

As to claim 10, Yacoub teaches one or more computer readable media as recited in claim 7, wherein obtaining an indication of which port of the network switch

Art Unit: 2157

the identified device is coupled to comprises obtaining the indication from the network switch (see paragraph 0036).

As to claim 11, Yacoub teaches one or more computer readable media as recited in claim 7, wherein the determining comprises generating, for at least one of the one or more identified devices, a ranking indicating a proximity of the identified device to the computing device relative to the other identified devices (see 0036).

As to claim 12, Yacoub teaches one or more computer readable media as recited in claim 11, wherein the plurality of instructions further cause to one or more processors to perform an additional act comprising: presenting, to a user, each of the generated rankings (see paragraph 0026).

As to claim 13, Yacoub teaches one or more computer readable media as recited in claim 7, wherein the computing device comprises both the computer readable media and the one or more processors (see figs. 3 and 4).

As to claim 14, Yacoub teaches one or more computer readable media as recited in claim 7, wherein the computing device comprises both the one or more processors and an I/O device to read the one or more computer readable media (see fig. 5).

As to claim 15, Yacoub teaches one or more computer readable media as recited in claim 7, wherein determining how physically distant the identified device is to the computing device comprises:

checking, whether the identified device shares the same port on the switch as

Art Unit: 2157

the computing device and with a smallest number of other devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and;

determining, if the identified device shares the same port on the switch as the computing device and with the smallest number of other devices also sharing the same port, that the identified device is one of the physically closest devices to the computing device (see paragraph 0025).

As to claim 16, Yacoub teaches one or more computer readable media as recited in claim 15, wherein determining how physically distant the identified device is to the computing device further comprises:

checking whether the identified device shares the same port on the switch as the computing device and with a smaller number of other devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and

determining, if the identified device shares the same port on the switch as the computing device and with the smaller number of other devices also sharing the same port, that the identified device is a second physically closest device to the computing device (see paragraph 0025).

As to claim 17, Yacoub teaches one or more computer readable media as recited in claim 16, wherein determining how physically distant the identified device is to the computing device further comprises:

checking whether the identified device shares the same port on the switch as the computing device without regard for a number of other devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and determining, if the identified device

Art Unit: 2157

shares the same port on the switch as the computing device without regard for the number of other devices also sharing the same port, that the identified device is a third closest device to the computing device (see paragraphs 0024 and 0025).

As to claim 18, Yacoub teaches one or more computer readable media as recited in claim 17, wherein determining how physically distant the identified device is to the computing device further comprises: checking whether the identified device shares the switch with any number of other devices also sharing the switch (see paragraphs 0025 – 0027 and 0036); determining, if the identified device shares the switch with any number of other devices also sharing the switch, that the identified device is a fourth physically closest device to the computing device (see paragraphs 0024 and 0025); and determining, if the identified device does not share the switch with any number of other devices also sharing the switch, that the identified device is a fifth closest device to the computing device (see paragraphs 0024 and 0025);

As to claim 19, Yacoub teaches one or more computer readable media as recited in claim 7, wherein determining how physically distant the identified device is to the computing device comprises:

if the identified device shares the same port on the switch as the computing device and with a smallest number of other devices also sharing the same port, then determining the identified device is one of the physically closest devices to the computing device (see paragraphs 0024 and 0025);

otherwise, if the identified device shares the same port on the switch as the computing device and with a smaller number of other devices also sharing the

Art Unit: 2157

same port, then determining the identified device is a second physically closest device to the computing device (see paragraphs 0024 and 0025;

otherwise, if the identified device shares the same port on the switch as the computing device and without regard for a number of other devices also sharing the same port, then determining the identified device is a third physically closest device to the computing device (see paragraphs 0024 and 0025); and

otherwise, if the identified device shares the switch with any number of other devices also sharing the switch, then determining the identified device is a fourth physically closest device to the computing device (see paragraphs 0024 and 0025).

As to claim 20, Yacoub teaches a method, implemented in a computing device that is part of a network, the method comprising:

detecting one or more network switches in the network (see paragraph 0024)

identifying one or more other devices of a particular type in the network (see paragraph 0040).

obtaining, for each of the identified one or more other devices and for at least one of the one or more network switches, an indication of which port of the network switch the device is coupled to, wherein the indication is obtained from at least one of the one or more network switches (see paragraph 0036); and

ranking, based at least in part on the obtained indications as well as which port of the network switch the computing device is coupled to, the one or more other devices in terms of their inferred physical proximity to the computing device (see

paragraph 0026).

As to claim 21, a method as recited in claim 20, wherein the one or more other devices of a particular type comprises one or more printers (see fig. 5).

As to claim 22, Yacoub teaches a method as recited in claim 20, wherein identifying one or more other devices of a particular type in the network comprises identifying the one or more other devices in the network by accessing a list of device identifiers (see paragraph 0026). As to claim 23, Yacoub teaches a method as recited in claim 20, wherein identifying one or more other devices of a particular type in the network comprises identifying the one or more other devices in the network by querying a plurality of devices on the network to determine, for each of the plurality of devices, whether the device is of the particular type (see paragraph 0026).

As to claim 24, Yacoub teaches a method as recited in claim 20, further comprising presenting, to a user, the ranking of at least one of the one or more other devices (see paragraph 0026).

As to claim 25, Yacoub teaches a method as recited in claim 20, wherein ranking a device of the one or more other devices comprises:

checking whether the device shares the same port on a network switch as the computing device and with a smallest number of additional devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); and

determining, if the device shares the same port on the network switch as the computing device and with the smallest number of additional devices also sharing the

Art Unit: 2157

same port, that the device is one of the physically closest devices to the computing device (see paragraphs 0025 – 0027 and 0036).

As to claim 26, Yacoub teaches a method as recited in claim 25, wherein ranking the device of the one or more other devices further comprises: checking whether the device shares the same port on the network switch as the computing device and with a smaller number of the additional devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); determining, if the device shares the same port on the switch as the computing device and with the smaller number of the additional devices also sharing the same port, that the device is a second physically closest device to the computing device (see paragraphs 0025 – 0027 and 0036) .

As to claim 27, Yacoub teaches a method as recited in claim 26, wherein ranking the device of the one or more other devices further comprises: checking whether the device shares the same port on the switch as the computing device without regard for a number of additional devices also sharing the same port (see paragraphs 0025 – 0027 and 0036); determining, if the device shares the same port on the switch as the computing device without regard for the number of additional devices also sharing the same port, that the device is a third physically closest device to the computing device (see paragraphs 0025 – 0027 and 0036).

As to claim 28, Yacoub teaches a method as recited in claim 27, wherein ranking the device of the one or more other devices further comprises: checking whether the device shares the switch with any number of additional devices also

sharing the switch (see paragraphs 0025 – 0027 and 0036); determining, if the device shares the switch with any number of additional devices also sharing the switch, that the device is a fourth physically closest device to the computing device (see paragraphs 0025 – 0027 and 0036); and determining, if the device does not share the switch with any number of additional devices also sharing the switch, that the device is a fifth closest device to the computing device (see paragraphs 0025 – 0027 and 0036).

As to claim 29, Yacoub teaches a method, comprising: discovering network switches in a network- (see paragraph 0042) identifying devices connected to the network (see 0020); determining each switch and each port to which the devices are coupled (see paragraphs 0020 – 0036) determining each switch and each port to which a user computer is coupled; and ranking the devices based upon their inferred physical proximity to the user computer (see paragraphs 0020 – 0036).

As to claim 31, the method of claim 29, wherein identifying devices comprises identifying printers (see fig. 5).

As to claim 32, Yacoub teaches the method of claim 29, wherein identifying devices comprises consulting a list of network device identifiers (see paragraph 0026).

As to claim 33, Yacoub teaches the method of claim 29, wherein identifying devices comprises querying multiple addresses on the network (see paragraph 0026).

As to claim 34, Yacoub teaches the method of claim 29, wherein determining each switch and each port to which the devices and the user computer are coupled comprises obtaining switch and port information from at least one network switch (see paragraph 0036).

As to claim 35, Yacoub teaches the method of claim 34 wherein obtaining switch and port information comprises obtaining the switch and port information from a connection table of the at least one network switch (see paragraph 0036).

As to claim 36, Yacoub teaches the method of claim 29, further comprising automatically selecting the physically closest device (see paragraph 0024)

As to claim 37, Yacoub teaches the method of claim 29, further comprising presenting the rankings to the user (see paragraph 0026).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub U.S. Patent Publication No.2003/0011805 and further in view of official

As to claim 30 is rejected over Yacoub and further in view of official notice.

Yacoub teaches the invention as mentioned above. Yacoub does not explicitly teach SNMP as recited in claim 30, however Yacoub suggests using a number of other protocols (see paragraph 0035) it would have been obvious to one of the ordinary skill in the art at the time of the was made invention to use SNMP protocol in Yacoub's invention because doing so would enable devices in a network to acquire knowledge of the type of protocol that is being used on the particular Fibre Channel interconnect.

(10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses them individually.

As per appellant's arguments filed on 6/19/2007, the appellant argues:

Yacoub does not teach " obtaining...an indication of which port of the network switch the identified device is coupled to. (Argument A ---- see brief page 8, lines 21 – 23).

In response to A, Yacoub teaches directing print jobs in a network printing system. In a network environment, it is inherently assumed that a network switch by its nature will provide the port number a device is connected to based on its Mac (Media Access control) address table. The Mac address table accomplishes this identification process by consulting its table of mapping of its ports to the NIC address (Network Interface Card) of whatever device is connected to any of the switch's ports.

Yacoub does not teach, "determining for at least one of the one or more identified devices, how PHYSICALLY distant the identified device is to the computing device". (Argument B ---- see brief page 9, lines 17 – 21).

In response to B, Yacoub teaches discovering a printer according to user preferences (see paragraphs 0008 – 0010). Furthermore, it is virtually impossible to determine the physical distance between two network devices as it all depends upon the length of the cable being used to establish the connectivity. If the devices are local and confined to a specific physical area (i.e. same floor). It is also Impossible to determine the physical distance between two networked devices if they are not local (i.e. traversing WAN , Wide Area Network, links). Because the only information that can be obtained in relation to distance is the number of devices (i.e. routers, hops) the communication has to traverse to reach its destination. To elaborate on the points presented, if for example a network device is connected to a network switch, however, the cable that establishes this connection is 100 feet long and runs up or down to the next floor, how can we determine the Physical distance of the device. Furthermore, if a

Art Unit: 2157

local device that is physically located in an office and it was decided to have it moved across the floor utilizing a 50 foot cable, how can a switch determine how physically close or far the connected device is. The switch does not know nor capable of determining the physical distance of any device connected to any of its ports.

Yacoub does not teach a method in which the distances of network devices from the computer are inferred from the switches and/ports which those network devices are coupled (Argument C ---- see brief page 11, lines 10 –12).

In response to C, appellant seems to trivialize the inferring of such a feat, the process by which one derive or conclude the physical distance between 2 devices is an enormous task that is not easily accomplished. At the very least, an explanation of such an inference should be detailed in the specification.

Yacoub does not teach ranking of devices to a user (Argument D ---- see brief page 13, lines 10 – 13).

In response to D, Yacoub discloses a print job in a network printing system where a user/client requests a print job using a command on a GUI menu. When the request is input, a server is queried to locate the physical locations of each printer on the network system. Once the locations of these printers are determined the server determines the most appropriate printer that is closest to the client /user (see paragraph 0027). If a second ranked printer is determined to be equally capable with the top most printer, then the distance of the second printer is determined and compared to the top

Art Unit: 2157

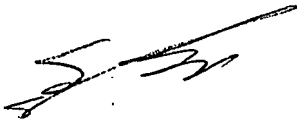
ranked printer to determine which of the two printers comply with user's preferences
(see paragraphs 0027 and 0028).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the
Related Appeals and Interferences section of this examiner's answer.

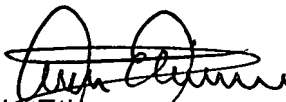
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Sargon Nano

Conferees :



Ario Etienne
ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100



Appeals Specialist Lynne Browne